

Please type a plus sign (+) inside this box ☒Approved for use through 09/30/00. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. **BS100/177618** Total Pages

First Named Inventor or Application Identifier

William M. Seal

Express Mail Label No. **EM216270037US****APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

**ADDRESS TO:**Assistant Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

1. ☒ **Fee Transmittal Form**  
(Submit an original, and a duplicate for fee processing)
2. ☒ **Specification** Total Pages **1254**  
(preferred arrangement as set forth below)
- Descriptive title of the invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the invention
  - Brief Summary of the invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
3. ☒ **Drawing(s) (35 usc 113)** [Total Sheets] **14**
4. ☒ **Oath or Declaration** [Total Pages] **4**
- a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with box 17 completed) [Note Box 5 below]
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, See 37 CFR 1.63(d)(2) and 1.33(b)
5. ☐ **Incorporation By Reference** (usable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ **Microfiche Computer Program (Appendix)**
7. **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all necessary)
- a. ☐ Computer Readable Copy
  - b. ☐ Paper Copy (identical to computer copy)
  - c. ☐ Statement verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

8. ☐ **Assignment Papers** (cover sheet & document(s))
9. ☐ **37 CFR 3.73(b) Statement** ☐ **Power of Attorney** (when there is an assignee)
10. ☐ **English Translation Document** (if applicable)
11. ☐ **Information Disclosure** ☐ **Copies of IDS** Statement (IDS)/PTO-1449 Citations
12. ☐ **Preliminary Amendment**
13. ☒ **Return Receipt Postcard (MPEP 503)** (Should be specifically itemized)
14. ☐ **\*Small Entity** ☐ **Statement filed in prior** Statement application; Status still proper and desired
15. ☐ **Certified Copy of Priority Document(s)** (If foreign priority is claimed)
16. ☐ **Other:** .....

\* A new statement is required to be entitled to pay small entity fees, except where one has been filed in a prior application and is being relied upon.

**17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:**

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_ / \_\_\_\_\_  
Prior application information: Examiner \_\_\_\_\_ Group/Art Unit \_\_\_\_\_

**18. CORRESPONDENCE ADDRESS**

☐ Customer Number or Bar Code Label \_\_\_\_\_ or ☒ Correspondence address below

Name	John S. Pratt						
	KILPATRICK STOCKTON LLP						
Address	1100 Peachtree Street						
	Suite 2800						
City	Atlanta	State	GA	Zip Code	30309		
Country	U.S.A.	Telephone	404.815.6367	Fax	404.815.6555		
Name (Print/Type)	Geoff L. Sutcliffe				Reg. No.	36,348	
Signature	<i>Geoff L. Sutcliffe</i>				Date	09/11/98	

<b>FEE TRANSMITTAL</b>  Note: Effective October 1, 1997. Patent Fees are subject to annual revision.		<b>Complete if Known</b>	
		Application Number	
		Filing Date	09/11/98
		First Named Inventor	William M. Seal
		Group Art Unit	
TOTAL AMOUNT OF PAYMENT (\$872.00)		Examiner Name	
		Attorney Docket Number	BS100/177618

<b>METHOD OF PAYMENT</b> (check one)		<b>FEE CALCULATION</b> (continued)																																																																																																																																																																																					
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:  Deposit Account Number: 11-0855 Deposit Account Name: KILPATRICK STOCKTON LLP <input checked="" type="checkbox"/> Charge any Additional Fee Required Under 37 CFR. 1.16 and 1.17 <input type="checkbox"/> Charge the Issue Fee Set in 37 CFR 1.18 at the Mailing of the Notice of Allowance		<b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Code</th> <th>Entity Fee (\$)</th> <th>Small Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English Specification</td><td></td></tr> <tr><td>147</td><td>2520</td><td>147</td><td>2520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920</td><td>112</td><td>920</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1840</td><td>113</td><td>1840</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>950</td><td>217</td><td>475</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1510</td><td>218</td><td>755</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>2060</td><td>228</td><td>1030</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td>Notice of appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1510</td><td>138</td><td>1510</td><td>Petition to institute a public use hearing</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1320</td><td>241</td><td>660</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1320</td><td>242</td><td>660</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>450</td><td>243</td><td>225</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>670</td><td>244</td><td>335</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>120</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>240</td><td>126</td><td>240</td><td>Submission of Information Disclosure Statement</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>790</td><td>246</td><td>395</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>149</td><td>790</td><td>249</td><td>395</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td></td></tr> <tr> <td colspan="5">*Reduced by Basic Filing Fee Paid</td> <td><b>SUBTOTAL (3) (\$)</b></td> </tr> </tbody> </table>		Large Code	Entity Fee (\$)	Small Code	Entity Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet		139	130	139	130	Non-English Specification		147	2520	147	2520	For filing a request for reexamination		112	920	112	920	Requesting publication of SIR prior to Examiner action		113	1840	113	1840	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	950	217	475	Extension for reply within third month		118	1510	218	755	Extension for reply within fourth month		128	2060	228	1030	Extension for reply within fifth month		119	310	219	155	Notice of appeal		120	310	220	155	Filing a brief in support of an appeal		121	270	221	135	Request for oral hearing		138	1510	138	1510	Petition to institute a public use hearing		140	110	240	55	Petition to revive - unavoidable		141	1320	241	660	Petition to revive - unintentional		142	1320	242	660	Utility issue fee (or reissue)		143	450	243	225	Design issue fee		144	670	244	335	Plant issue fee		122	130	120	130	Petitions to the Commissioner		123	50	123	50	Petitions related to provisional applications		126	240	126	240	Submission of Information Disclosure Statement		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	790	246	395	Filing a submission after final rejection (37 CFR 1.129(a))		149	790	249	395	For each additional invention to be examined (37 CFR 1.129(b))		Other fee (specify) _____						Other fee (specify) _____						*Reduced by Basic Filing Fee Paid					<b>SUBTOTAL (3) (\$)</b>
Large Code	Entity Fee (\$)	Small Code	Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																		
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																																																			
127	50	227	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																																			
139	130	139	130	Non-English Specification																																																																																																																																																																																			
147	2520	147	2520	For filing a request for reexamination																																																																																																																																																																																			
112	920	112	920	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																			
113	1840	113	1840	Requesting publication of SIR after Examiner action																																																																																																																																																																																			
115	110	215	55	Extension for reply within first month																																																																																																																																																																																			
116	400	216	200	Extension for reply within second month																																																																																																																																																																																			
117	950	217	475	Extension for reply within third month																																																																																																																																																																																			
118	1510	218	755	Extension for reply within fourth month																																																																																																																																																																																			
128	2060	228	1030	Extension for reply within fifth month																																																																																																																																																																																			
119	310	219	155	Notice of appeal																																																																																																																																																																																			
120	310	220	155	Filing a brief in support of an appeal																																																																																																																																																																																			
121	270	221	135	Request for oral hearing																																																																																																																																																																																			
138	1510	138	1510	Petition to institute a public use hearing																																																																																																																																																																																			
140	110	240	55	Petition to revive - unavoidable																																																																																																																																																																																			
141	1320	241	660	Petition to revive - unintentional																																																																																																																																																																																			
142	1320	242	660	Utility issue fee (or reissue)																																																																																																																																																																																			
143	450	243	225	Design issue fee																																																																																																																																																																																			
144	670	244	335	Plant issue fee																																																																																																																																																																																			
122	130	120	130	Petitions to the Commissioner																																																																																																																																																																																			
123	50	123	50	Petitions related to provisional applications																																																																																																																																																																																			
126	240	126	240	Submission of Information Disclosure Statement																																																																																																																																																																																			
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																			
146	790	246	395	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																																			
149	790	249	395	For each additional invention to be examined (37 CFR 1.129(b))																																																																																																																																																																																			
Other fee (specify) _____																																																																																																																																																																																							
Other fee (specify) _____																																																																																																																																																																																							
*Reduced by Basic Filing Fee Paid					<b>SUBTOTAL (3) (\$)</b>																																																																																																																																																																																		
<b>2. CLAIMS</b> <table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>790</td><td>201 395 Utility filing fee</td><td>\$790.00</td></tr> <tr><td>106</td><td>330</td><td>206 165 Design filing fee</td><td></td></tr> <tr><td>107</td><td>540</td><td>207 270 Plant filing fee</td><td></td></tr> <tr><td>108</td><td>790</td><td>208 395 Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>150</td><td>217 75 Provisional filing fee</td><td></td></tr> <tr><td colspan="3"><b>SUBTOTAL (1)</b></td><td><b>(\$790.00)</b></td></tr> </tbody> </table>		Large Entity	Small Entity	Fee Description	Fee Paid	101	790	201 395 Utility filing fee	\$790.00	106	330	206 165 Design filing fee		107	540	207 270 Plant filing fee		108	790	208 395 Reissue filing fee		114	150	217 75 Provisional filing fee		<b>SUBTOTAL (1)</b>			<b>(\$790.00)</b>	<table border="1"> <thead> <tr> <th>Fee from</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>Extra Fee from below</td> <td></td> </tr> <tr> <td>Total Claims 4 -20= 0 x 22 = \$0.00</td> <td></td> </tr> <tr> <td>Independent Claims 4 -3= 1 x 82 = \$82.00</td> <td></td> </tr> <tr> <td>Multiple Dependent Claims</td> <td></td> </tr> <tr> <td><b>SUBTOTAL (2)</b></td> <td><b>(\$82.00)</b></td> </tr> </tbody> </table>		Fee from	Fee Paid	Extra Fee from below		Total Claims 4 -20= 0 x 22 = \$0.00		Independent Claims 4 -3= 1 x 82 = \$82.00		Multiple Dependent Claims		<b>SUBTOTAL (2)</b>	<b>(\$82.00)</b>																																																																																																																																												
Large Entity	Small Entity	Fee Description	Fee Paid																																																																																																																																																																																				
101	790	201 395 Utility filing fee	\$790.00																																																																																																																																																																																				
106	330	206 165 Design filing fee																																																																																																																																																																																					
107	540	207 270 Plant filing fee																																																																																																																																																																																					
108	790	208 395 Reissue filing fee																																																																																																																																																																																					
114	150	217 75 Provisional filing fee																																																																																																																																																																																					
<b>SUBTOTAL (1)</b>			<b>(\$790.00)</b>																																																																																																																																																																																				
Fee from	Fee Paid																																																																																																																																																																																						
Extra Fee from below																																																																																																																																																																																							
Total Claims 4 -20= 0 x 22 = \$0.00																																																																																																																																																																																							
Independent Claims 4 -3= 1 x 82 = \$82.00																																																																																																																																																																																							
Multiple Dependent Claims																																																																																																																																																																																							
<b>SUBTOTAL (2)</b>	<b>(\$82.00)</b>																																																																																																																																																																																						

<b>SUBMITTED BY</b>		<b>Complete (if applicable)</b>	
Typed or printed Name	Geoff L. Sutcliffe	Reg. No.	36,348
Signature	<i>Geoff L. Sutcliffe</i>	Deposit Account User ID	11/0855
	Date	09/11/98	